Research Priorities Working Group
Draft Terms of Reference

1. Collect & synthesize research priorities in key sectors
2. Identify research priorities NOT being addressed
3. Connect with international groups to address priorities

4. Create awareness of new science/knowledge, the use of existing science/knowledge, and to help articulate demand

5. Report on new science relevant to climate services, the implementation of that science and report on iterative and participatory processes of the WG

Themes shaping the research landscape (2013)

1. Large focus on Social Sciences
2. Aligning research to support the networks & projects

   Integrate climate services value chain into each stage of project
3. New language:

   Risk Management, Insurance, Economic Valuation
4. Both GFCS & CSP making a difference
5. Old problems still exist:
   - We are still missing end-users, private industry, other domains
   - Much great work that has already been done.
   - Relation to the GFCS?

     Particularly research -> www.gfcs-climate.org/RMP

1. What are the most pressing existing and emerging needs and gaps? (2013)

1. We need to change our tools & questions:
   - Tell me what you do & why you do it, not what you need
   - Need to incorporate more social sciences
2. Seasonal forecasting & Decadal Prediction
3. Increased accuracy/timeliness of WX & flood forecasts
4. Sector & regional decision support systems –
   1. Early warning systems, linking HydroMet & Ag
   2. Drought onset/timing/cessation –
   3. Ecosystem services
   4. Coastal zones: SLR Saltwater intrusion, data integration
5. End-to-end need:
   - Generate, analyze, and communicate more effectively
     - did not call out a specific need in one area over the other

2. What understanding, data & tools should be developed to address these needs & gaps? (2013)

1. Scales: local/national/regional/global
   now/WX -> seasonal/decadal -> climate
2. Precision: Perfect vs Good Enough
   - Credibility & Trust
   - Trust = f(quality of info, standing of institution, time)
   - Standards, Assessment, Metrics & Good Practices will help
3. Institutional challenges,
   - not data rich, forecasting capacities are resource limited
   - Need tools that work in data scarce environments
   - Need to improve the feedback loop to inform research

3. What mechanisms exist to bridge this working group to disciplinary research communities (2013)

1. Identify research questions that entrain regional scientists
2. Engage regional climate centers to design research relevant to their communities
3. Take advantage of other internationally coordinated programs GFCS/WCRP etc
4. Develop networks that link Climate Service chain users+providers+funders+researchers
5. Have to make the climate services enterprise relevant/ interesting to the other communities

4. How do we move this process forward in terms of group structure and funding? (2013)

1. USAID Climate Resilient Development Framework
   - Scope – Assess - Design - Implement&Manage - Evaluate&Adjust
   - CS isn't/shouldn't be siloed. Research that embeds CS in the CRD process as an integral part makes CS more relevant to Dev
2. Scoping: Starting now and over the next year
3. Survey & expand current research needs studies:
   1. GFCS, Provia-WMO WCRP, Future Earth -> What's not there?
   2. Where can CSP address research needed from these & gaps
   3. Where can we leverage the unique breadth of the CSP community?

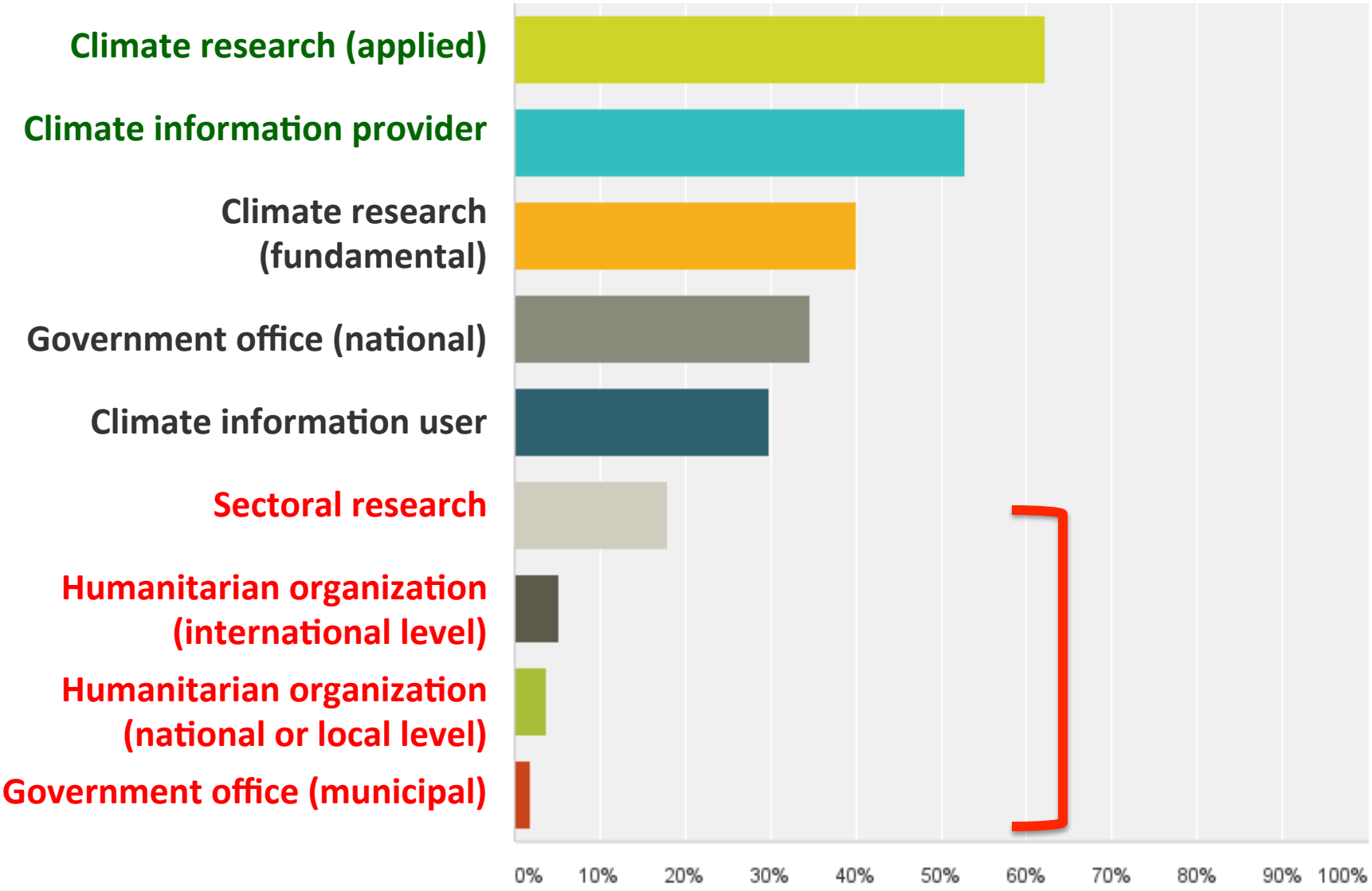
A first look at the CSP Survey:

Research priorities for the development of climate services

Catherine Vaughan,
Lawrence Buja,
Andrew Kruczkiewicz

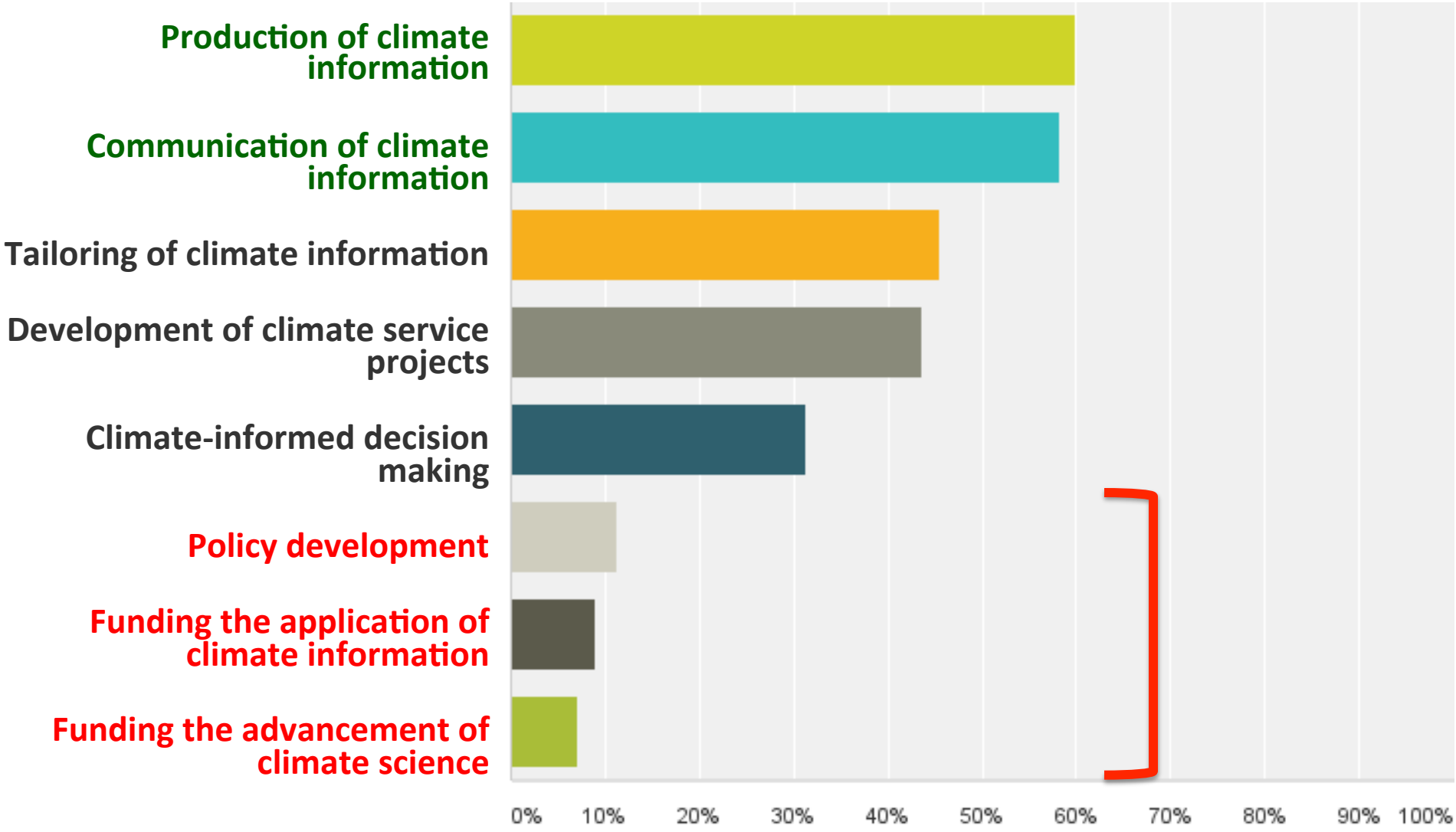
Q1: Role your organization plays in the climate service community?

Answered: 312 Skipped: 1



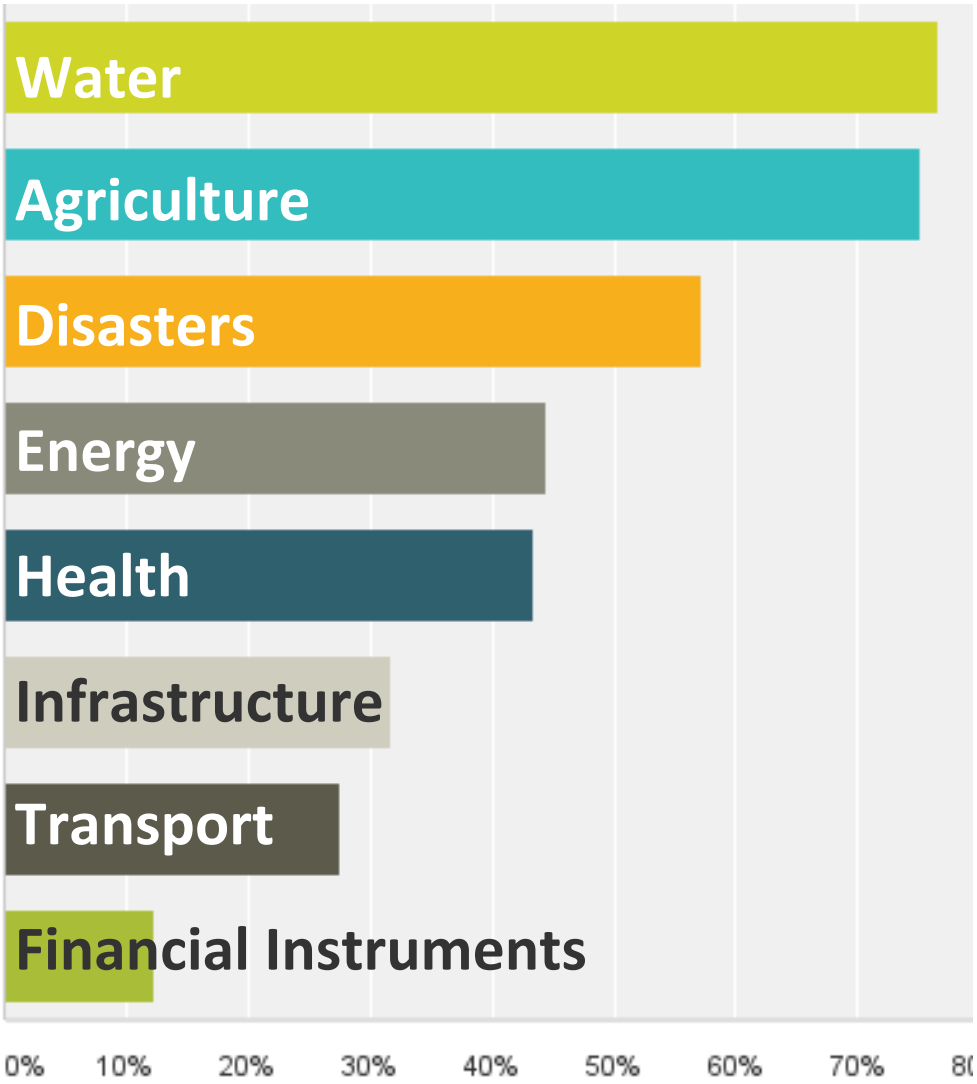
Q2: In what activities are you personally involved?

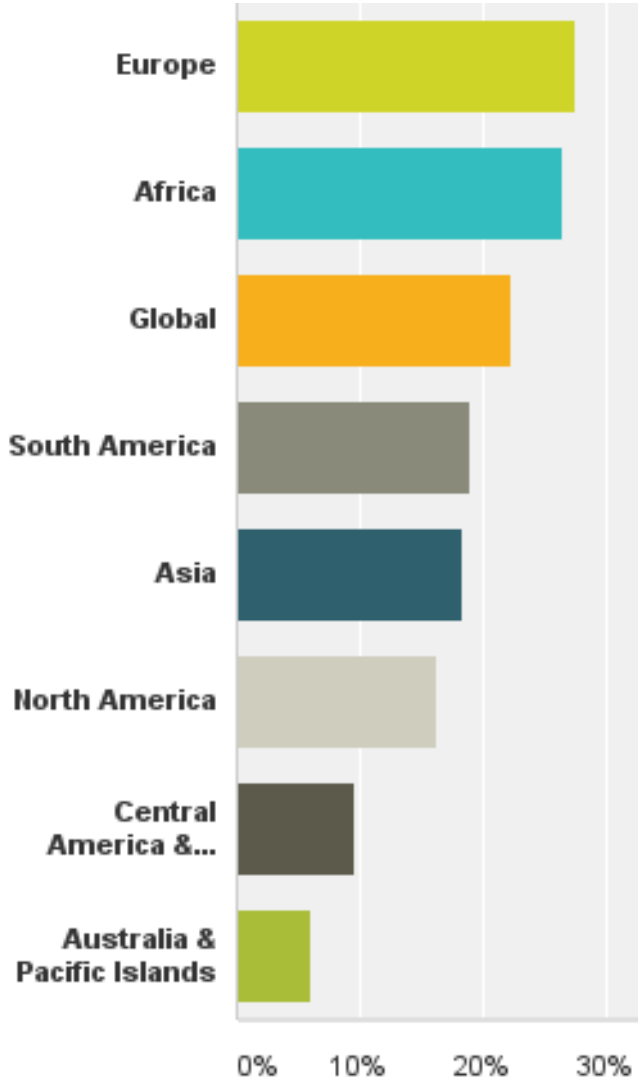
Answered: 312 Skipped: 1



Q3/4 Sectors/Regions of your work?

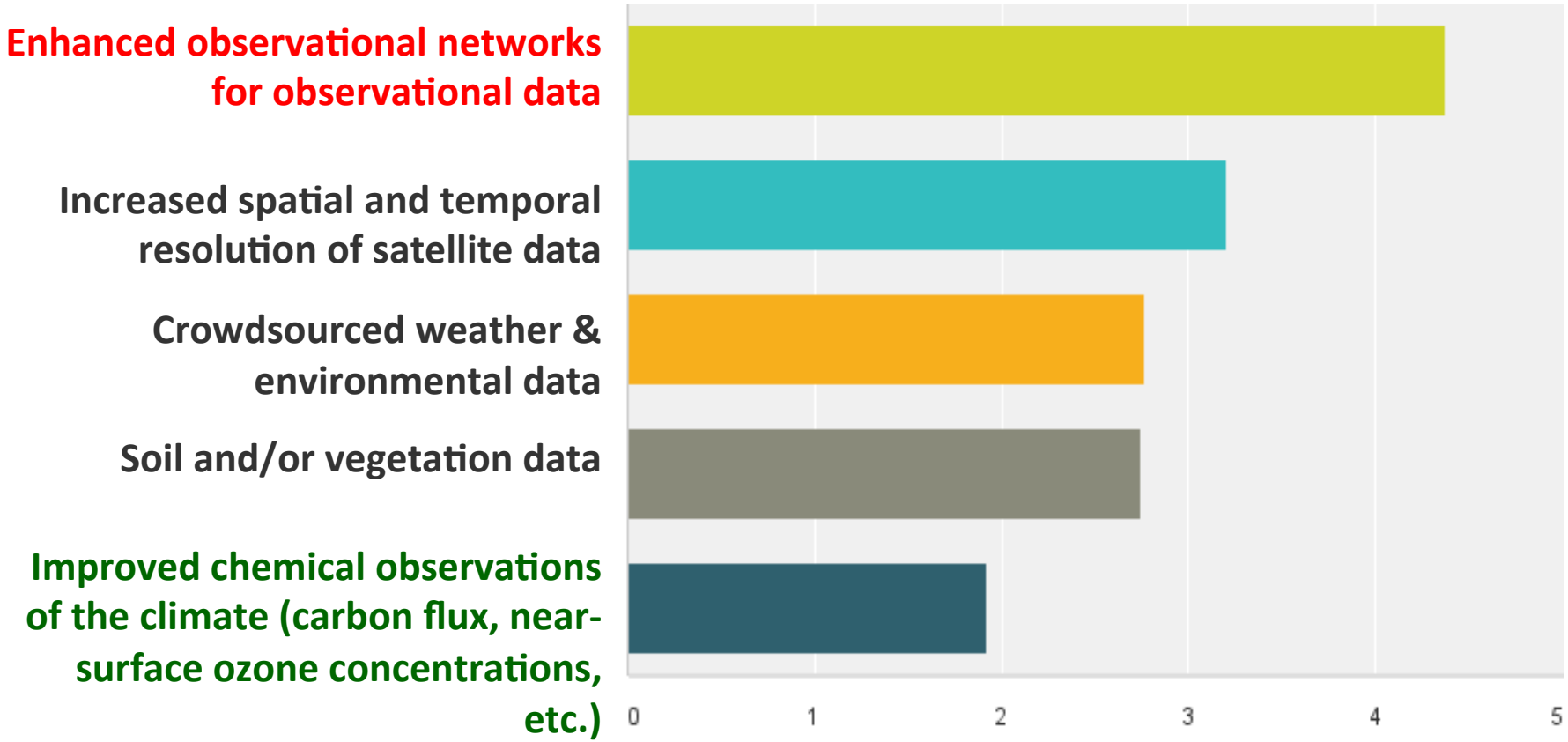
Answered: 290 Skipped: 23





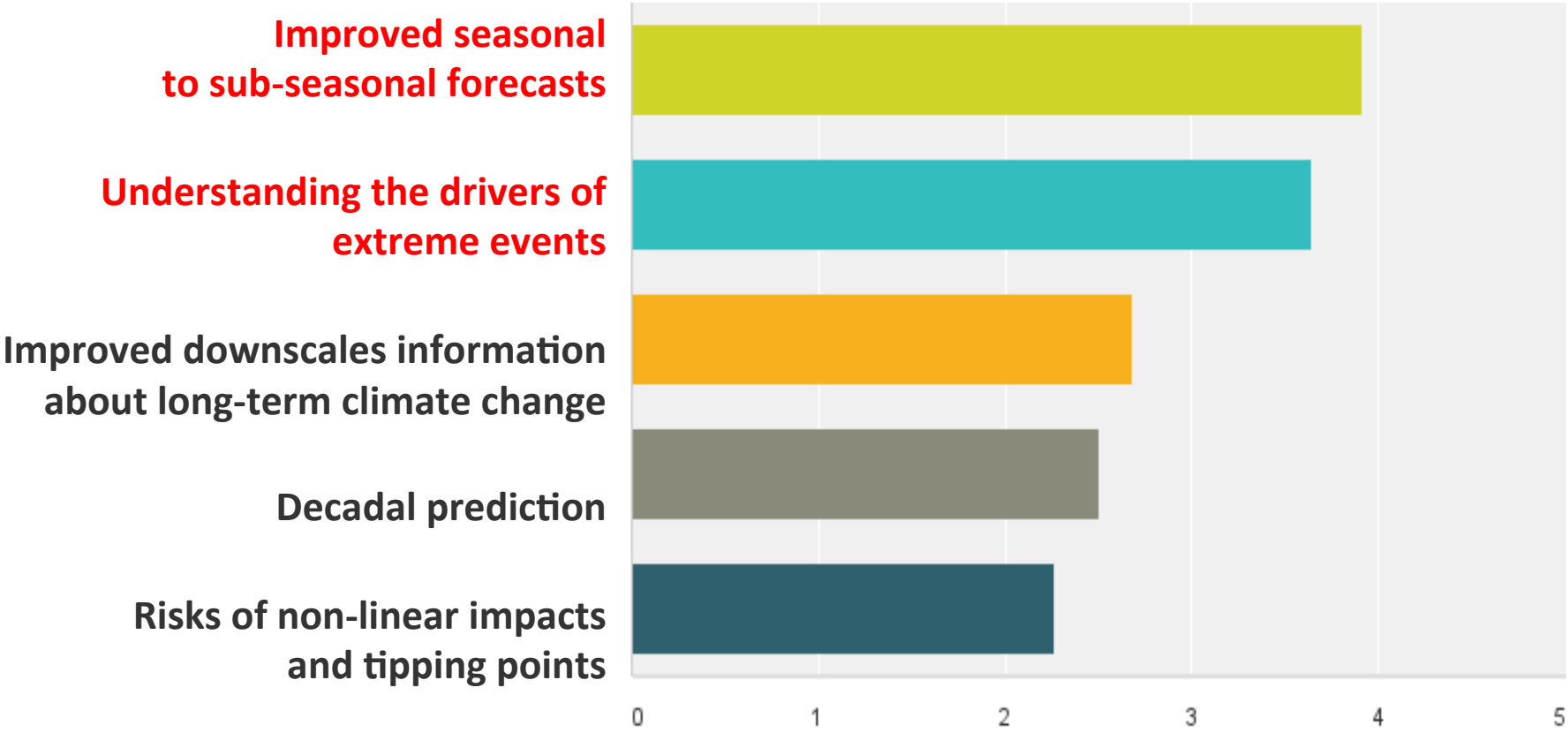
Q6: Priorities: Observations & monitoring

Answered: 259 Skipped: 54



Q8: Priorities: Modeling and prediction

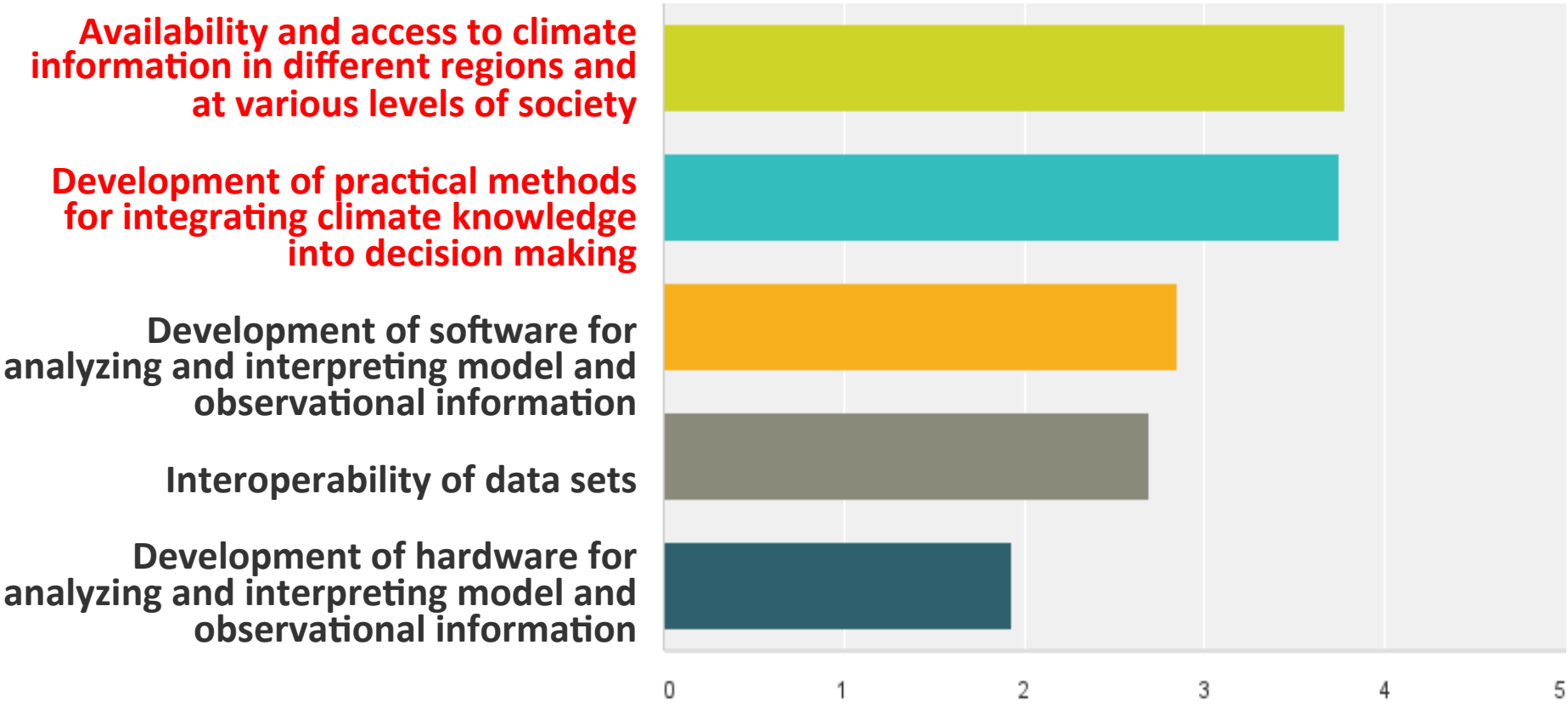
Answered: 259 Skipped: 54



Preliminary results: do not redistribute - contact vaughan/buja for more information

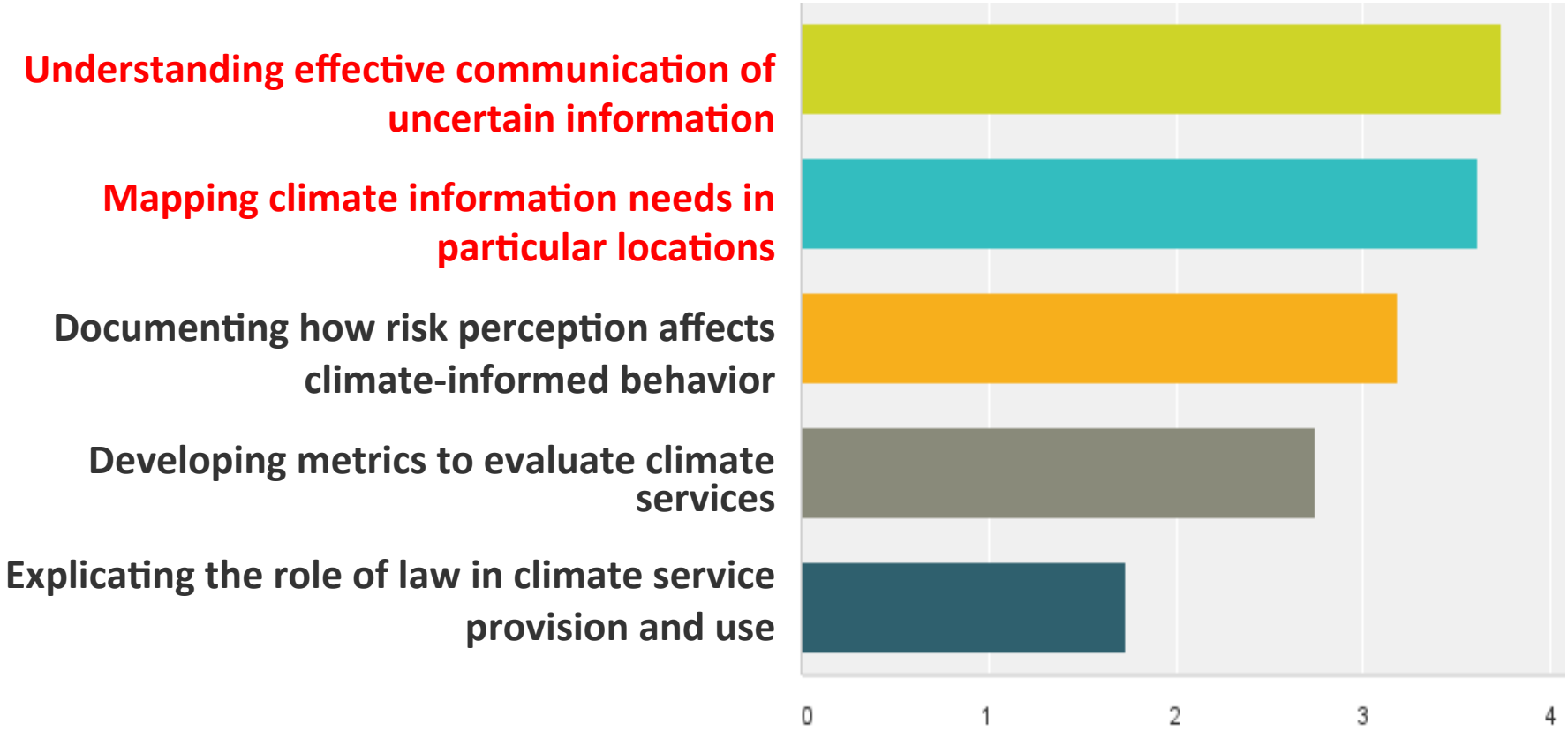
Q10: Priorities: Data Archive, analysis, exchange, and processing systems

Answered: 259 Skipped: 54



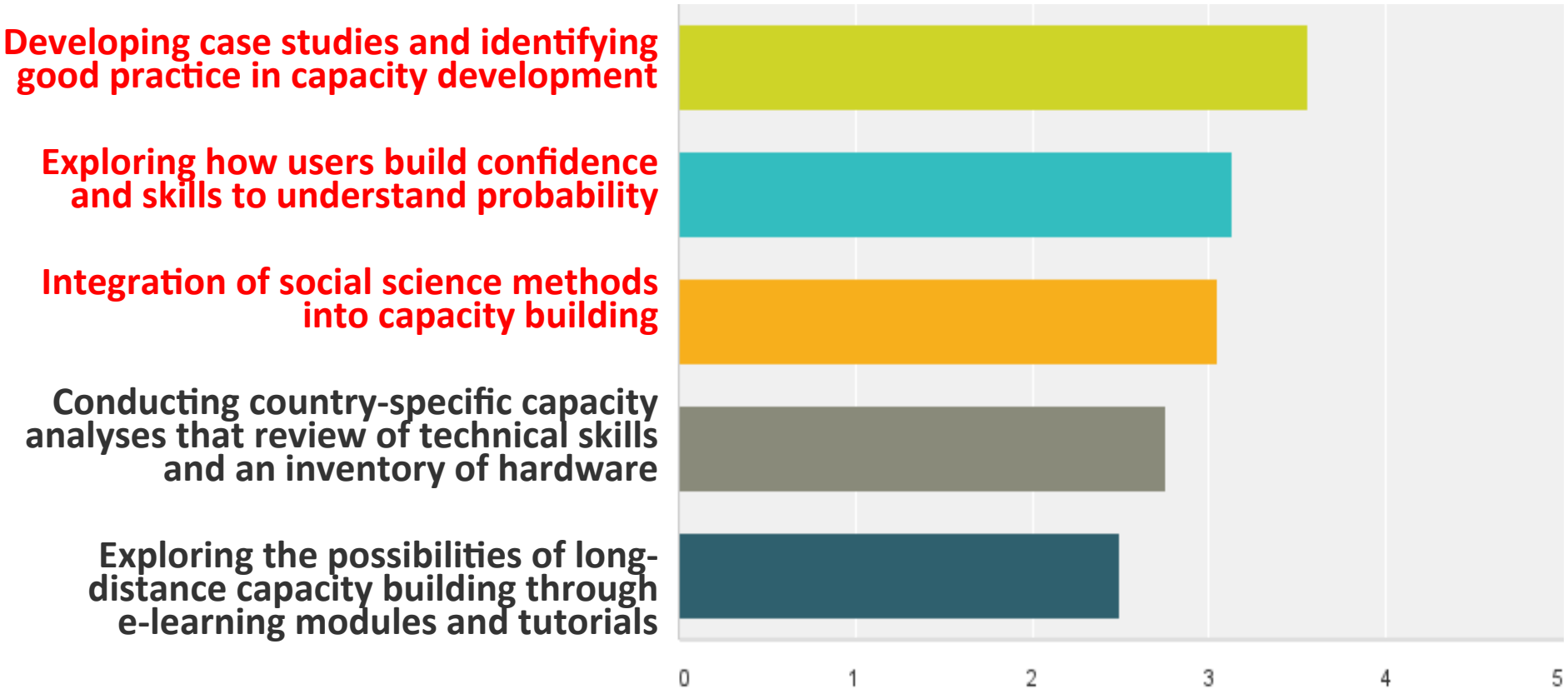
Q12: Priorities for better connecting information to decision making.

Answered: 259 Skipped: 54



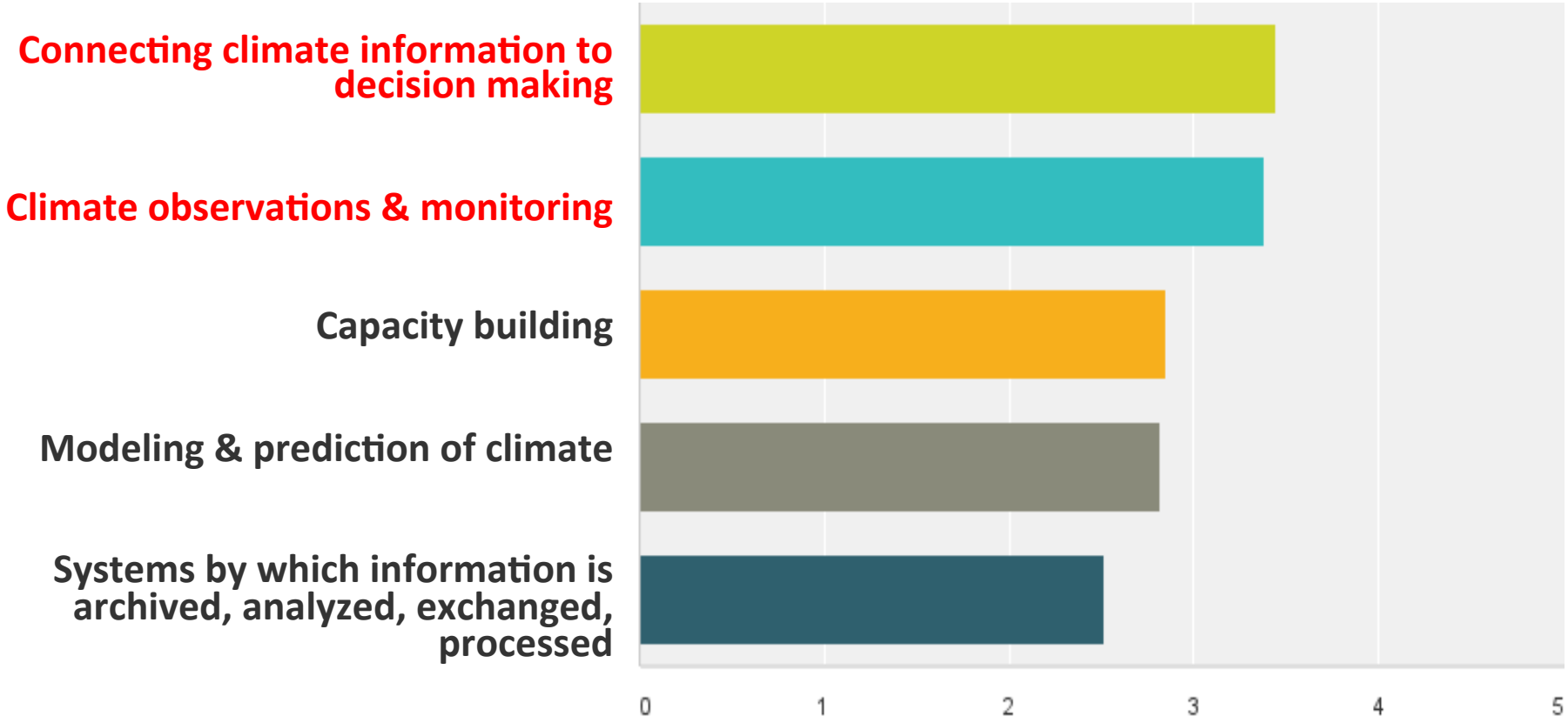
Q14: Priorities: Capacity development

Answered: 259 Skipped: 54



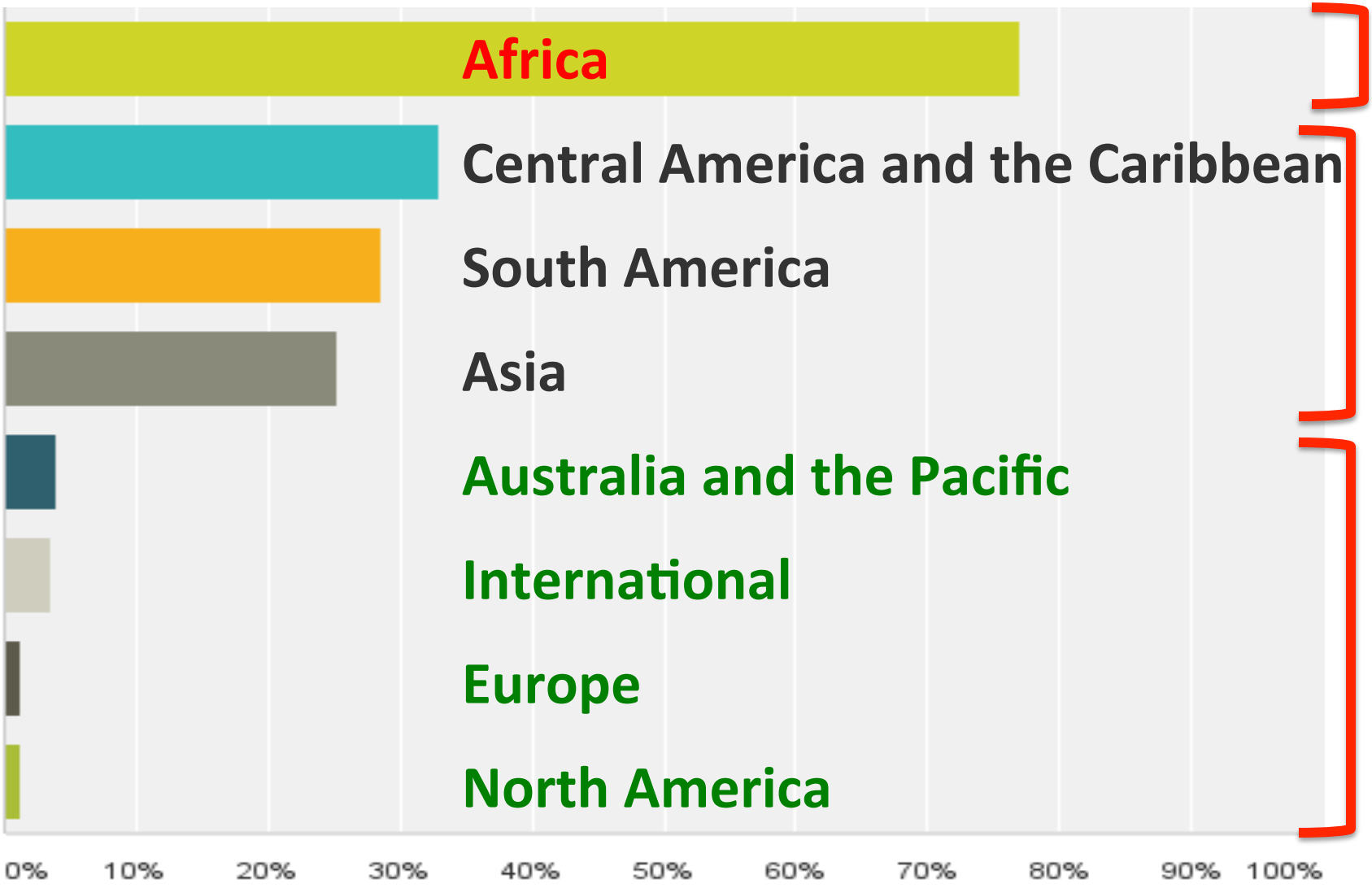
Q16: Research is most needed to improve the efficacy of climate services

Answered: 245 Skipped: 68



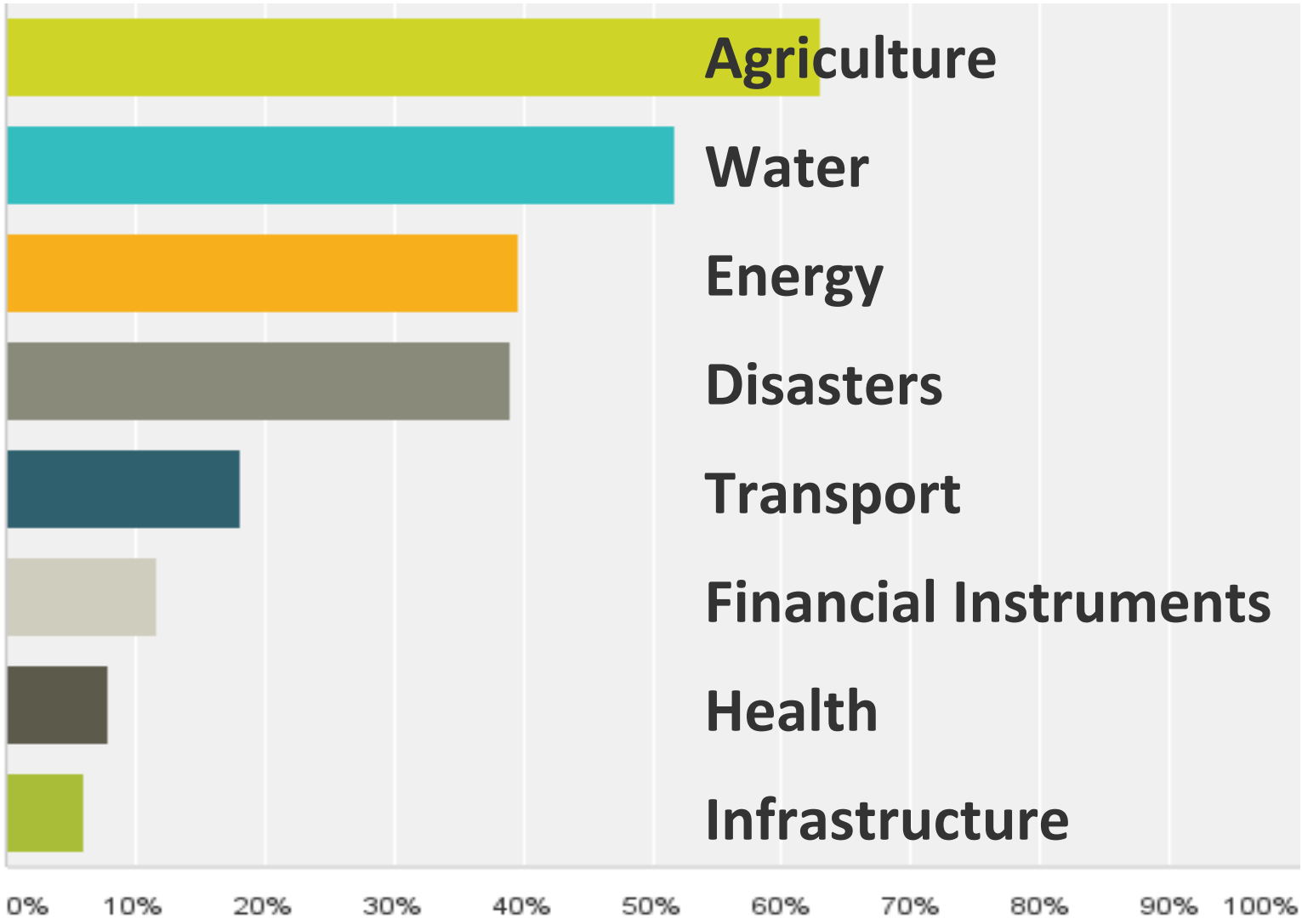
Q18: Where are climate services least developed?

Answered: 249 Skipped: 64



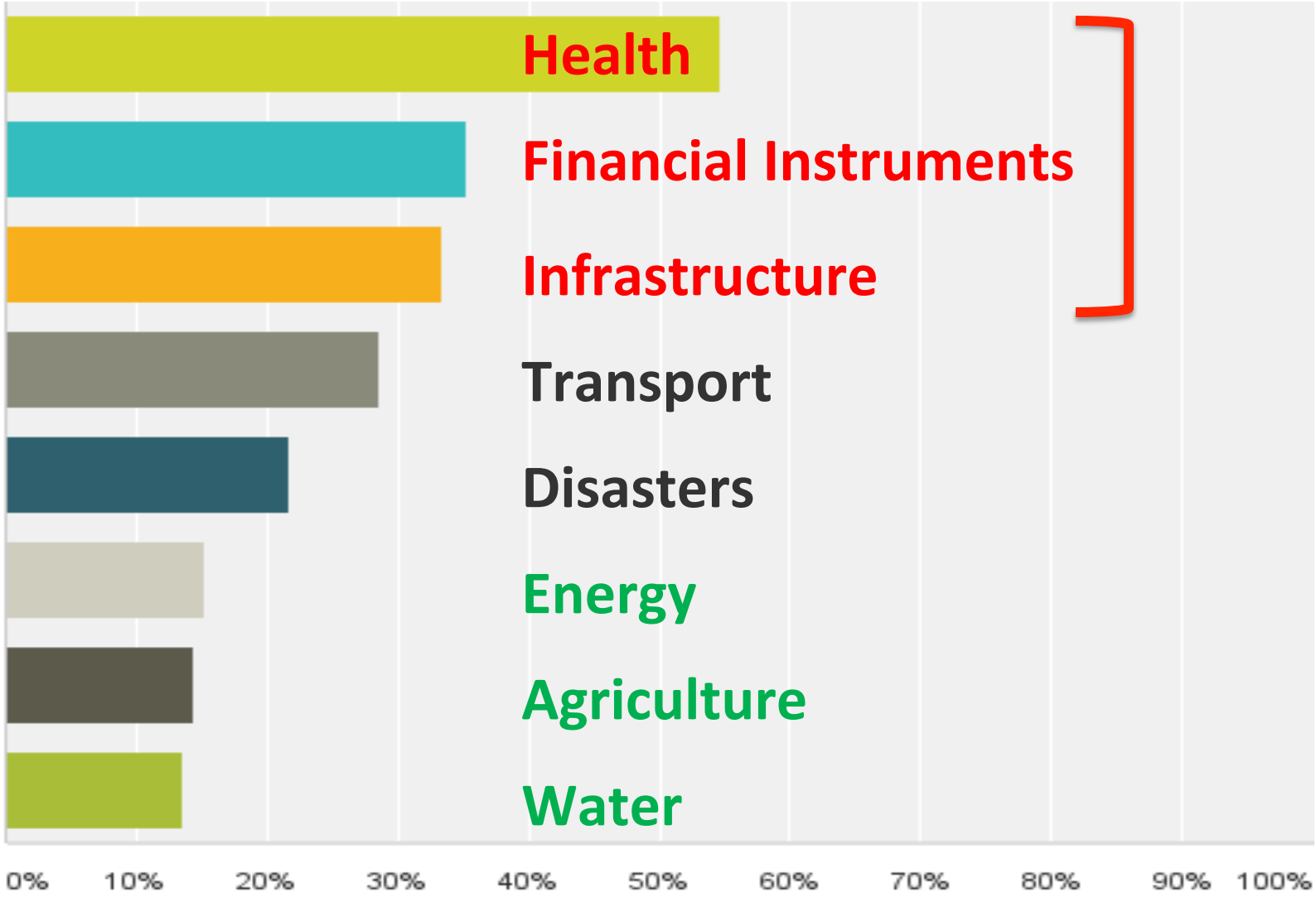
Q19: In what sectors are climate services most developed?

Answered: 249 Skipped: 64



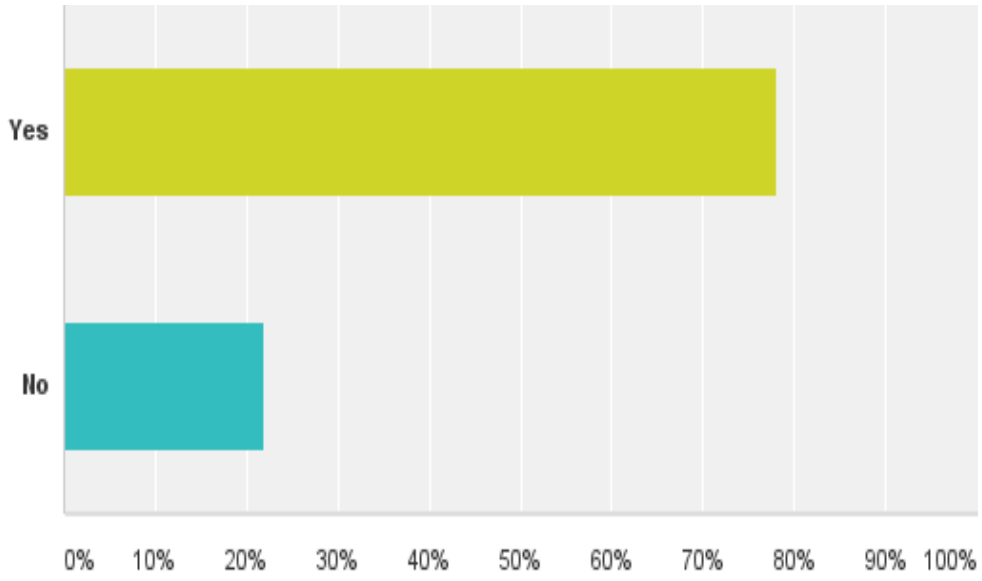
Q20: In what sectors are climate services least developed?

Answered: 249 Skipped: 64



Q27: Are you willing to be contacted about the opinions expressed here?

Answered: 218 Skipped: 95



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GFCS Definitions

Climate service: Providing climate information in a way that assists decision making by individuals and organizations. A service requires appropriate engagement along with an effective access mechanism and must respond to user needs.

Climate information: Climate data, products and/or knowledge.

Climate product: A derived synthesis of climate data. A product combines climate data with climate knowledge to add value.

"The timely production and delivery of useful climate data, information and knowledge to decision makers"
(US NRC, 2001)